MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016/2017

DMA5018 – MULTIMEDIA APPLICATIONS

(DIT / DBIS)

10 MARCH 2017
3.00 p.m – 5.00 p.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **2 pages** with 5 questions.
2. Answer **ALL** questions.
3. Please write all your answers in the answer booklet provided.

QUESTION 1 [20 MARKS]

Baharom was assigned to develop an interactive multimedia module called "Number-Matching" game. This game is an educational courseware that teaches kindergarten students about numbers where the students should drag numbers and drop it into object group that has the correct amount.

a) Define *interactive* multimedia courseware. (2 Marks)

b) Discuss **THREE** advantages of interactive multimedia courseware project over non-interactive multimedia courseware project. (6 Marks)

c) Suggest **THREE** possible interactivity activities that can be included in "*Number-Matching*" module. (6 Marks)

d) Discuss **THREE** disadvantages of hosting a multimedia project on a website. (6 Marks)

QUESTION 2 [20 MARKS]

a) Define *hotspots*. (2 Marks)

b) Explain **THREE** categories of hotspots. (6 Marks)

c) Discuss **TWO** disadvantages of using image map for an e-commerce website. (4 Marks)

d) Considering visitor with low bandwidth internet connection, suggest **FOUR** recommendations in designing image map for an e-commerce website. (8 Marks)

QUESTION 3 [20 MARKS]

a) Sarabanun has developed many multimedia objects and elements for one project. She finds it difficult to track changes and identify each of the objects and elements. Suggest **FIVE** best practice for file naming convention that could help to keep her project organized. (10 Marks)

b) Considering visitor with low bandwidth internet connection, suggest **FIVE** guidelines to avoid bandwidth bottleneck when delivering video streaming as one of multimedia content in a website. (10 Marks)

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QUESTION 4 [20 MARKS]

a) Describe the differences between *alpha development* and *beta development* in multimedia development process. (4 Marks)

b) List **FOUR** categories of expenses incurred in producing multimedia project. (4 Marks)

c) Explain **THREE** technical challenges in testing stage that a multimedia team may encounter. (6 Marks)

d) List **SIX** Digital Versatile Disc (DVD) standard format. (6 Marks)

QUESTION 5 [20 MARKS]

a) In a context of multimedia content, define the following terms:
   i. Hypertext (2 Marks)
   ii. Font typeface (2 Marks)
   iii. Panoramic images (2 Marks)

b) What is the primary difference between *cel animation* and *computer animation*? (2 Marks)

c) Calculate each of the following audio file size in Kilobytes. Show steps of your calculation.

Table 1: Audio file details.

	Duration	**Sampling rate**	**Sound Resolution**	**Channel**
i)	15 seconds	44,100 Hz	2 bytes	Mono
ii)	3 minute	22.05 kHz	2 bytes	Stereo

(10 Marks)

d) List **TWO** standards for analog video display. (2 Marks)

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